

SOME NEW *AGARISTIDAE*, WITH REMARKS ON NOMENCLATURE.

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(With a text-figure.)

THE well-known family-name *Agaristidae* was rejected in 1918 (Nov. Zool. xxv, p. 383) by Sir George Hampson, Bart., in favour of *Phalaenoididae*, on the ground that *Phalaenoides* Lewin, 1805, is older than *Agarista* Leach, 1815, Hampson proposing, i.e., for the first time, a rule of Nomenclature to the effect that "the family and subfamily names are derived from the oldest generic name in the respective groups." Applying this rule to all the families and subfamilies of Lepidoptera, Hampson replaces a large number of familiar names by new ones; thus the *Pieridae* are called by Hampson *Asciadae*, the *Lycaenidae* are turned into *Cupidinidae*, the *Hesperiidae* into *Erynnidae*, the *Acronyctinae* appear as *Zenobianae*, the *Syntomidae* as *Amatidae*, etc. etc. As the Code of Zoological Nomenclature does not contain a rule as to the stability and priority of names of categories higher than genera, Hampson was at liberty to invent a rule of his own. His proposal, although it does not conform with usage, would be acceptable if it led to a stabilisation of the names of families, subfamilies, etc. But such a result could only obtain—

(1) if classification were so perfect that there could be no doubt as to the family, subfamily or tribe into which each genus should be placed;

(2) if there were no difference of opinion or uncertainty as to the genotype of composite genera; and

(3) if there were no difference of opinion as to the validity of certain categories of generic names, as, for instance, names not defined by a description or not accompanied by the citation of a species.

Whoever is acquainted with systematics knows that not one of the three premises is fulfilled, and that uncertainty and difference of view are particularly frequent with regard to the correct application of the older generic names. I will give some illustrations of the three premises from Hampson's work.

1. Difference of view as to classification: Hampson, i.e. p. 384, replaces the name *Hypsiidae* by *Callimorphidae*, making *Callimorpha* the family-type and *hera* the genotype. However, the inclusion of *Callimorpha* in the "*Hypsiidae*" is due to an error of observation on the part of Hampson, who maintains that the hindwing-venuration of *Callimorpha* is the same as in *Hypsa* = *Asota*, while in reality the venuration is as in *Arctia*, *Callimorpha* being a true Arctiid and not a Hypsid. Therefore the name *Callimorphidae* is not admissible for that family.

2. Difference of view as to the genotypes of old names: Hampson, i.e. p. 383, makes *strix* L. 1758 the genotype of *Noctua*. The description of *strix*, however, is that of a Cossid, and the name has accordingly been applied subsequently by Linnaeus himself, Cramer, and all modern authors to a species of

Cossidae. If Hampson was right in selecting *strix* L. 1758 as genotype of *Noctua*, the Cossids would become *Noctuidae*, according to Hampson's rule, and what we call *Noctuidae* would have to receive another name.—A further illustration: Hampson, l.c. p. 385, replaces *Erycinidae* by *Plebejidae*, selecting *cupido* L. 1758 as type of *Plebejus* L. 1758, i.e. the first species mentioned under *Plebeji* in *Syst. Nat.* ed. x. p. 482. But in 1896 Kirby had already stated that *argus* L. 1758 was the type of *Plebejus*. Now, *argus* belongs to what is generally known as *Lycaenidae*. Therefore, if Hampson's rule is adopted and Kirby's prior type-designation considered valid, and if, further, Linnaeus's divisions of *Papilio* are accepted as generic terms dating from 1758—to which many Lepidopterists strongly object—the name *Plebejidae* would have to be employed for the Lycaenids and not for the Erycinids.

3. Difference of opinion as to the validity of certain kinds of generic names: Many Entomologists regard the Linnaean subdivisions of *Papilio* as subgeneric names, *Eques*, *Heliconius*, *Danaus*, *Nymphalis*, *Plebejus*, *Barbarus*; others accept as subgeneric terms even the Linnaean subdivisions *Trojanus*, *Achivus*, *Candidus*, etc.; while others again object either to both these categories of designations or only to the subdivisions.—Hübner's Tentamen (1805) is accepted only by a minority of Lepidopterists, and Billberg's and Dejean's undescribed catalogue names are a bone of contention, etc.—What a confusion would be the result, if Hampson's rule were applied consistently by the adherents of opposite views!

It is to be hoped that the Commission on Zoological Nomenclature will take up the matter and issue a ruling. Meanwhile we may take it that there is no reason whatever for changing the name of the family to which belong the species hereafter described: *Agaristidae*.

There is a second point with regard to the nomenclature of the *Agaristidae* which I should like to mention here. In *Lep. Phal.*, Suppl. ii, p. 549 (1920), Hampson states that "*Heraclia*, Hübn. Verz. p. 180 (1827), type *geryon*," has priority over *Xanthospilopteryx* (—the year of issue of p. 180 of the Verz. probably was 1822, not 1827, but that does not concern us here—). Hübner describes his Coitus *Heraclia* and mentions three species: "*Heraclia Euphemia* Cram., *H. Dominula* Linn., *H. Placentia* Abb." The description says: Forewing black, with green gloss and pale spots, hindwing and abdomen red. This description does not apply to *euphemia*, but very well to *dominula* and *placentia*, which fact Hampson ignores, mechanically designating the first species as type. Such action is quite contrary to his principle of rejecting every generic name that is not described, or characterised by a figure, with which principle I heartily agree. If, however, indelible names are rejected because there are no descriptions accompanying them, i.e. if we make the validity of a name dependent on the presence of a description of the name (or, rather, of a description of the concept for which the name stands), the description is rendered paramount, and definite statements contained in it are consequently of primary importance in the selection of the genotype. It was, therefore, *ultra vires* to select a species without green gloss on the forewing and with a yellow-banded abdomen as genotype of a genus said by the author to be characterised by the forewing being glossy green black and the abdomen red. The first of the three included species which agrees with this description of *Heraclia* is *dominula*, and this species should have been selected as genotype by Hampson.

1. *Xanthospilopteryx hollandi* Cockerell (1905).

Syn.: *Xanthospilopteryx kirbyi* Holland (1897) nec *X. kirbyi* Carp. (1893).

Hampson, *Lep. Phal.* Suppl. ii, p. 557, sub no. 74, says that *hollandi* is a synonym of *kirbyi*. I agree, of course, with Professor Cockerell that *kirbyi* of 1897 is invalidated by *kirbyi* of 1893, although this older name *kirbyi* sinks as a synonym of *X. pardalina* Walk. (1869).

In *Lepidopt. Catal.* pt. 5, pp. 14 and 16, Strand erroneously gives as locality of *Xanthospilopteryx abucata* and *X. lomata* "Deutsch-Südwestafrika"; the species were described from Bahiburg, Kamerun.

2. *Rothia arrosa* sp. nov.

♀. In colour similar to *R. eriopis* f. *carminata* Roths. (1896), but the body above red, the termen of both wings spotted with white and undulate, etc.

Head and palpus black, spotted with cream-colour as in *R. eriopis*; pronotum black, with two creamy spots (meso-metanotum denuded); abdomen carmine above, shading into orange at tip, greater portion of tergite I, base of II, a basal spot on III, and vestiges of basal spots on IV and V black, underside orange along middle, with some black ventral spots; legs orange, tarsi black, the segments tipped with white.

Wings, above: forewing black, with four creamy white spots as in *R. eriopis*, but bearing in addition two creamy white dots in front of SM², one before and the other (slightly larger) beyond middle, outside the upper discal spots three blue dots, similar dots on discocellulars and before tornus, termen very distinctly scalloped, in the bays white dots, which are merged together at apex of wing into a white line (fringe), dot before tornus larger than the others.—Hindwing irregularly scalloped, rather deeply excised before middle, white fringe-spots distinct, fringe of apex white; base and a broad terminal band black, the band produced basad at costa, but not quite extended to the narrow basal area, rest of wing carmine, in middle of cell and on discocellular an ill-defined small creamy spot.

Underside like upper, but forewing without the submedian spots and without metallic dots; hindwing carmine, extreme base orange mixed with black, terminal band extending as a narrow stripe along costal margin to near base; white cell-spots more distinct than above.

Length of forewing: 28 mm., breadth 14 mm.

Hab. E. Madagascar: Lac Aloatra, i.-ii. 1925, one ♀.

3. *Arrothia bicolor melanobasis* subsp. nov.

♂. The yellow area of forewing, above, reduced to an antemedian band of about 2.5 mm. width which crosses cell a short distance from apex, the basal area black powdered with yellow; yellow area of hindwing likewise reduced, the base being black for about 3 mm.

On underside the proximal area of forewing much paler than in *A. bicolor bicolor* Roths. and densely shaded over with black, as is also the costal portion of the yellow area of the hindwing.

Hab. E. Madagascar: Lac Aloatra, i.-ii. 1925, 1 ♂.

4. *Arctiopais ambusta celis* subsp. nov.

♂. Larger than our ♂♂ of *A. a. ambusta* Mab. (1881); forewing with a ferruginous terminal band, 7 mm. broad at apex, tapering behind. Black terminal band of hindwing much narrower than in *A. a. ambusta*, 7 mm. broad below apex and 1 mm. before anal angle.

On underside the terminal band of forewing as above, but nearly as deep black as that of hindwing; in ♂ of *A. a. ambusta* the forewing bears a narrow black submarginal band which reaches neither costa nor tornus and is separated from termen by a tawny-orange area.

Length of forewing: 21 mm.

Hab. Madagascar: Diego Suarez, i.1917 (G. Melou), 1 ♂.

The orange colouring has much suffered; a large proportion of the upper tales being rubbed off, the specimen is very pale.

5. *Aegocera comorana* sp. nov.

♀. In colouring unlike any other species of *Aegocera*, markings diffuse, but the orbicular and the reniform conspicuous.

Head and palpus white, frons with broad blackish median stripe, a large spot on segment II of palpus and nearly the whole of III black; pro- and mesonotum chocolate, with three white stripes, metanotum with a blackish tuft each side and an orange tuft in front of tympanal organ; abdomen orange, tergite I with black metallic double tuft, II to VII with diffuse blackish median spots, a few black scales before apex of VII; breast and underside of abdomen pale yellow, prosternum almost white; legs orange, two spots on fore- and midtibiae black, fore- and midtarsi and segments II to V of hindtarsus nearly entirely black.

Wings, above; forewing ecru drab densely irrorated with blackish scales, on discocellulars a silvery line accompanied each side by a pale wood-brown line, the whole enclosed by a brownish black ring which is open on the costal side, proximally to this spot a small circular spot of the same colour; from base to middle a diffuse whitish stripe, gradually widening distally, occupying part of the cell and being more or less bounded by the submedian fold, on the distal side of the discocellular spot a diffuse whitish patch joined to the stripe below, stripe and patch distally bounded by an indistinct pale olive-buff line, which consists of two parts, an anterior rounded portion and a more proximal straight posterior portion, on this line as well as between base and cell-apex, on the whitish stripe and patch and before hindmargin metallic silvery scales, termen slightly undulate, a thin terminal line brown, fringe ecru drab, silvery in certain lights. — Hindwing ochre-yellow, a terminal band blackish, 2 to 3 mm. broad, of nearly even width, interrupted at the veins, termen slightly undulate, fringe for the greater part white, at least in anterior third of wing.

Underside ochre-yellow, shading into creamy buff at termen, this terminal area unicolorous on forewing or shaded with brown proximally, before anal angle of hindwing some blackish submarginal spots; discocellular and orbicular of forewing circular, black, on hindwing a small black spot at upper cell-angle.

Length of forewing: 18 to 21 mm.

Hab. Grande Comoro, x.-xi.1921 (G. F. Leigh), 3 ♀♀.

"Larva very handsome, feeds on wild vine" (G. F. Leigh).

6. *Aegocera ferrugo* sp. nov.

♂. Size of *A. rectilinea* Boisd. (1836), both wings ferruginous red with buff yellow fringes.

Frontal process longer than in *A. rectilinea*, its end-surface broader transversely than sagittally, cordiform, slightly incurved ventrally and angulate dorsally, supra-oral transverse ridge higher mesally than laterally, rounded-triangular in dorsal aspect, sides of frons parallel. Frons and upperside of thorax pale cream colour, a stripe running from eye across pronotum and bordering tegula dorsally chestnut red, a narrow lateral border of tegula the same colour. First and second segments of palpus cream-colour on inside, chestnut mixed with cream and black on outside, long hair orange-ochraceous, most of the outer lateral hairs black, third segment almost entirely black. Abdomen orange-ochraceous, bases of tergites III to VII black, breast orange-ochraceous, underside of abdomen paler and sparsely mixed with black; fore- and midtibiae black mixed with grey, the long hair orange-ochraceous mixed with grey, hindtibia grey mixed with black, long hair of base orange-ochraceous, that of apical half more grey; tarsi black spotted with white; lateral scent-tuft clay-colour.

Wings nearly shaped as in *A. rectilinea*, but the termen longer and the hind-margin correspondingly shorter; forewing ferruginous red, costal and hind-margins black dusted with creamy scales, a diffuse stripe from base along submedian fold to near termen and a diffuse terminal line cream-colour dusted with black, cream-coloured scales scattered over the rest of the wing except centre: near base of cell an obscure creamy spot mixed with black, proximally to apex of cell an oblong spot with the corners rounded off and beyond apex of cell a uniform spot, both cream-colour, edged with black, the outer spot 2.5 mm. long and less than 1 mm. broad, costal margin incrassate beyond middle, along this incrassation a stripe partly denuded of scales; fringe of termen and of distal portion of costa buff-yellow, the longer scales paler, creamy sealing along fringe dense.—Hindwing a little more tawny than forewing, i.e. less red, a vestige of a darker tawny discocellular spot, fringe of termen deeper yellow than on forewing, long hair of base and abdominal margin yellow.

Underside ferruginous, costal margins and extreme edges of termen as well as the terminal fringes, the base of the forewing and the abdominal fringes of the hindwing yellow, hindwing more or less yellow between cell and costal margin, a dark ferruginous discocellular spot indicated.

Genitalia: Apical half of tenth tergite dorsally carinate, the sides distinctly flattened out, tip not carinate, curved down, very sharply pointed. Hook of harpe longer and stronger than in *A. rectilinea*.

Length of forewing: 16.5 mm.

Hab. Abyssinia: Hora Daka, 31.v.1914 (O. Kovacs), 1 ♂.

7. *Aegocera anthina* spec. nov.

♀. Size of *A. menete* Cram. (1775), colouring quite different.

Frons and sealing of antenna cream-colour, apical surface of frontal process almost circular, a little wider ventrally than above, supra-oral ridge almost straight, not produced in middle, palpus pale yellow, apex of segment III and a large lateral patch on II black; thorax above orange-yellow, on each side a

large patch on pronotum and a lateral and a dorsal stripe on meso-metanotum black with metallic gloss, on abdominal tergite I a median tuft of the same colour, abdomen above and below, breast and legs pale orange-ochraceous, two large patches on foretibia, more or less confluent, two separate patches on midtibia, segments II to V of fore- and midtarsus, and III to V of hindtarsus black, hindtibia with vestige of a subapical black spot and segment II of hindtarsus partly black, long spur of proximal pair not quite reaching to base of apical pair.

Upperside of forewing : a maize-yellow antemedian patch from hindmargin to near costa, 3 mm. broad in front and behind, about twice as wide in middle, its proximal margin straight, 5 mm. from base anteriorly and nearly 7 mm. posteriorly, the outer margin of the patch angulate below cell, in middle of patch below cell a black dot, the patches edged with black, between it and base a plumbeous double spot and a small and a larger yellow spot at costal margin, a plumbeous line and a ferruginous red patch between cell and hindmargin ; at apex of cell a transverse comma pale maize-yellow surrounded by black, proximally and distally of it a plumbeous bar, the outer one placed on the discocellulars produced basad on the median vein ; beyond this comma a large costal patch, irregularly rounded, maize-yellow, about 5 mm. wide, edged with black, on its outside a plumbeous line which is continued to hindmargin of wing, running along the black border of the yellow patches and being connected with the discocellular bar, a second, less prominent, metallic line about $\frac{1}{2}$ mm. further distal, the interspace between the two lines ferruginous red ; terminal area pale drab shaded with plumbeous and proximally washed with ferruginous red, terminal fringe and extreme costal edge maize-yellow.—Hindwing ochre-yellow, a discocellular transverse dot and a terminal band of 5 mm. width black, terminal fringe tipped with maize-yellow.

Underside black and yellow ; yellow antemedian patch of forewing extended to base and costal margin, costal margin more broadly bordered with yellow than above.

Neuration : SC^2 of forewing (= 10) from anterior side of areole, not from apex.

Length of forewing : 22 to 24 mm.

Hab. N. Nigeria : Bauchi Plateau, 2 ♀♀.

Aletopus gen. nov.

♀. In aspect similar to *Weymeria* Karsch (1895), wings shorter and more rounded, particularly the hindwing. Frons conical as in *Aegocera*, the process truncate, with raised rim, supra-oral ridge medianly produced into a short sharp tooth. Palpus as in *Aegocera*. Antenna (♀) not dilated distally. Tibiae without long hair, no spines on mid- and hindtibiae.

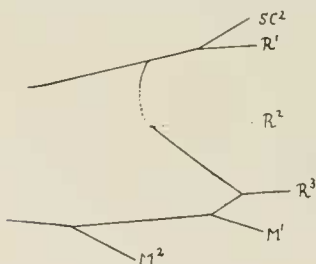


FIG. 1.—*Aletopus*, hindwing.

Neuration : SC^2 (= 10) of forewing from before apex of areole, stalk of SC^{2-4} as long as the areole, M^1 from well before angle, being farther from R^3 than this is from R^2 ; in hindwing SC^2 and R^1 stalked, M^1 from well before angle (text-fig.).

Genotype : *A. imperialis* sp. nov.

8. *Aletopus imperialis* sp. nov.

♀. Body, antenna, palpus and legs black, with the following white spots: one on antenna near base, two on each side of frons, one beyond eye, one each side of pronotum, one at apex of first and second segment of palpus, one at apex of coxae, three on tibiae, one at apex of first segment of tarsi, two on each side of the abdominal segments, one dorsally on last segment and one ventrally at apex of the first three sternites; meso-metanotum orange, black mesally, with a black dot above costal margin of forewing, tergites I to VI of abdomen orange at apex.

Wings above: forewing rufous from base to lower median, this area 8 mm. wide at costal vein, 12 mm. at hindmargin, its distal margin being obliquely rounded, rest of wing black, with a white discal band from near costal margin across discocellulars to beyond M^2 , almost straight on inner side, sinuous on outer side, 3 mm. broad in front, and nearly 5 mm. at R^2 , behind the band a round white spot on SM^2 , fringe white at apex of wing.—Hindwing scarlet, with black terminal band bearing a row of five white dots, the band 5 mm. broad below apex and about 3 mm. in front of anal angle, fringe white at apex of wing.

Underside like upper, but basal area of forewing scarlet, and the terminal band of the hindwing with six white spots.

Length of forewing: 24 mm., breadth 14 mm.

Length of hindwing at subcosta 18 mm., at submedian 17 mm., breadth 15 mm. (from tip of C to tip of SM^2).

Hab. Tanganyika Territory: Bungu, Usambara, ix. 1921 (Loveridge), 1 ♀.

9. *Acantuerta ladina* sp. nov.

♀. Similar to *A. thomensis* Jord. (1904), black border of hindwing not continued along abdominal margin to base.

Frons, palpus, legs and underside of abdomen without white markings, breast dark brown, sides of frons ferruginous chestnut.

Upperside of forewing: the orbicular in cell replaced by an oblique line bearing plumbeous scaling, a plumbeous oblique line behind cell at basal fifth, plumbeous scaling also on discocellular spot, on the line connecting it with hindmargin, and at the outside of the discal line.—Hindwing orange, a black terminal band 5 mm. wide below apex and 3 mm. before anal angle.

Underside: base of forewing pale orange, this area extending beyond middle on submedian fold, oblique distally, its anterior corner separated by an oblique black cell-spot which is united with the black median black, outside this black band an obscure discal band, pale brown like termen (not white as in *A. thomensis*), reaching from near costal margin to M^2 , ground outside this band blackish.—Hindwing orange, with black dot at upper cell-angle, black terminal band as above, but somewhat paler except its proximal edge.

Length of forewing: 23 mm.

Hab. Lado Enclave: Shambo, 17.xii.1911, 1 ♀.

10. *Seudyra vitalis* sp. nov.

♂. In size and shape similar to *S. longipennis*, colouring quite different, the forewing being creamy white banded and striped with chocolate-brown.

Head creamy white, chocolate-brown at side above palpus and beyond eye, frons raised into a high cone, the raised rim of the small circular apical surface of the cone ventrally produced into a tooth; palpus blackish brown, ventral surface of segment I and tip of II and III white. Thorax chocolate brown, with three white stripes, abdomen, breast and legs buff yellow, on upperside of abdomen a row of rather diffuse black spots, upperside of fore- and midtibiae and tarsi blackish.

Wings, above; forewing creamy white, costa brownish black from base to two-thirds, from this border extend two abbreviated chocolate-brown bands, the first across cell, oblique, stopping short just below base of M^2 , the second including the discocellulars, 3 mm. broad, reaching to M^2 and being drawn out into three vein-streaks on R^3 , M^1 and M^2 , interspace between the bands 3 mm. broad, a terminal band composed of chocolate-brown lines and spots separated by creamy white interspaces, the inner margin of this band well defined, but the component parts more or less diffuse, particularly behind, where the band is more extended white than brown, width at apex 8 to 9 mm., at tornus 4 mm., from base along hindmargin a chocolate-brown stripe, 3 mm. broad at base, 2 near tornus, joining the terminal band, in this stripe a diffuse white line.—Hindwing buff-yellow, a round spot at upper cell-angle, another, somewhat larger, distally of lower cell-angle, which it does not touch, a terminal band from costal margin to near R^3 , scalloped on proximal side and nearly 4 mm. broad between the veins, followed by a submarginal row of three spots, all blackish brown with a chocolate tint.

On underside the hindmarginal brown stripe of forewing absent, base washed with yellow, terminal band almost uniformly chocolate except behind, where the outer portion is white and the last spot of the inner portion blackish.—On hindwing the terminal band narrower than above, more distinctly separated from fringe by a yellow line.

Length of forewing: 31 mm.

Hab. Annam: Thado Cuarao (R. Vitalis de Salvaza), 2 ♂♂, type in Mus. Brit.